

REMARKS

The present application was filed on November 21, 2003 with claims 1-20. Claims 1-20 are currently pending in the application. Claims 1, 19 and 20 are the independent claims.

In the Office Action, claims 1, 3, 4, 6-8, 10-13, 18 and 19 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,969,538 to Whetsel (hereinafter “Whetsel”). In addition, claims 17 and 20 are rejected under U.S.C. §103(a) as being unpatentable over Whetsel in view of U.S. Patent No. 6,681,352 to Fredrickson (hereinafter “Fredrickson”)

The Examiner indicates that claims 2, 5, 9 and 14-16 would be allowable if rewritten in independent form.

The Examiner also objects to the drawings as failing to comply with 37 CFR 1.84(p)(5) because the Specification fails to mention element 605 in FIG. 6. The Specification has been amended to correct this deficiency.

Applicants traverse the §102(b) and §103(a) rejections of claims 1, 3, 4, 6-8, 10-13 and 18-20. Applicants respectfully request reconsideration of these rejections in view of the following remarks.

Applicants initially note that the Manual of Patent Examining Procedure (MPEP), Eighth Edition, August 2001, §2131, specifies that a given claim is anticipated “only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference,” citing Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Moreover, MPEP §2131 further indicates that the cited reference must show the “identical invention . . . in as complete detail as is contained in the . . . claim,” citing Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Independent claims 1 and 19 each set forth an internal signal pad “arranged at a location away from the periphery of the die.” Notably, it is efficient test access to such an internal signal pad that forms one of the primary advantages of this invention (see the Specification, p. 4, lines 3-6). Nonetheless, the Examiner, in formulating the §102(b) rejection of these claims, argues that these internal signal pads are anticipated by “input pad D1” in Whetsel (Office Action, pp. 2-3).

Applicants respectfully disagree. In contrast to claims 1 and 19, the pads in Whetsel exclusively occupy positions at the sides of the dies on which they are located. For example, with regard to the die shown in Whetsel's FIG. 1, Whetsel states at col. 1, line 66 - col. 2, line 10:

The die is shown having a top side A, right side B, bottom side C, and left side D for convenience of description in regard to its position on the wafer. The die also has at least one voltage supply (V) pad and at least one ground (G) pad for supplying power to the die. Side A has pad locations 1-7, B has pad locations 1-8, C has pad locations 1-8, and D has pad locations 1-9. The arrangement of the buffer/pad combinations on each side (A,B,C,D) corresponds to the desired pinout of the package that the die will be assembled into, or to signal terminals on a multi-chip module (MCM) substrate onto which the die will be connected.

Later, when describing FIG. 6, Whetsel states at col. 4, lines 35-51:

In exemplary FIG. 6, the die of FIG. 5 is schematically shown as it would operate in the bypass mode of the present invention. The die is placed in bypass mode by taking the mode pad to a logic state opposite that of the functional mode logic state, in this case a logic low. In bypass mode, the die's FCL, input, output, and input/output buffers are disabled and pad sites of corresponding position between sides A and C and between sides D and B are electrically connected. In bypass mode the die is transformed into a simple interconnect structure between sides A and C and between sides D and B. The interconnect structure includes a plurality of conductors extending parallel to one another between sides A and C, and a further plurality of conductors extending parallel to one another between sides D and B. While in bypass mode, signals from a tester apparatus can flow through the interconnects between A and C and between D and B to access and test a selected die on a wafer.

Based on the foregoing, it is clear that Whetsel fails to describe "an internal signal pad arranged at a location away from the periphery of the die," but rather describes pads located at the four sides of the die. Consequently, Applicants respectfully submit that Whetsel fails to describe each and every element in claims 1 and 19 and, therefore, does not anticipate these claims under §102(b). Applicants request that rejection of claims 1 and 19 be withdrawn.

Dependent claims 3, 4, 6-8, 10-13, 18 are believed allowable for at least the reasons identified above with regard to claim 1, and these claims are also believed to specify additional separately patentable subject matter relative to Whetsel and other prior art of record.

With regard to the §103(a) rejection of dependent claims 17 and 20 with reference to Whetsel in view of Frederickson, Applicants respectfully submit that Frederickson fails to supplement the above-described fundamental deficiencies of Whetsel as applied to claims 1 and 19. Therefore, the subject matter as a whole of dependent claims 17 and 20 would not have been obvious at the time the invention was made and should be allowed.

In view of the above, Applicants believe that claims 1-20 are in condition for allowance, and respectfully request the withdrawal of the §102(b) and §103(a) rejections.

Respectfully submitted,



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